



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

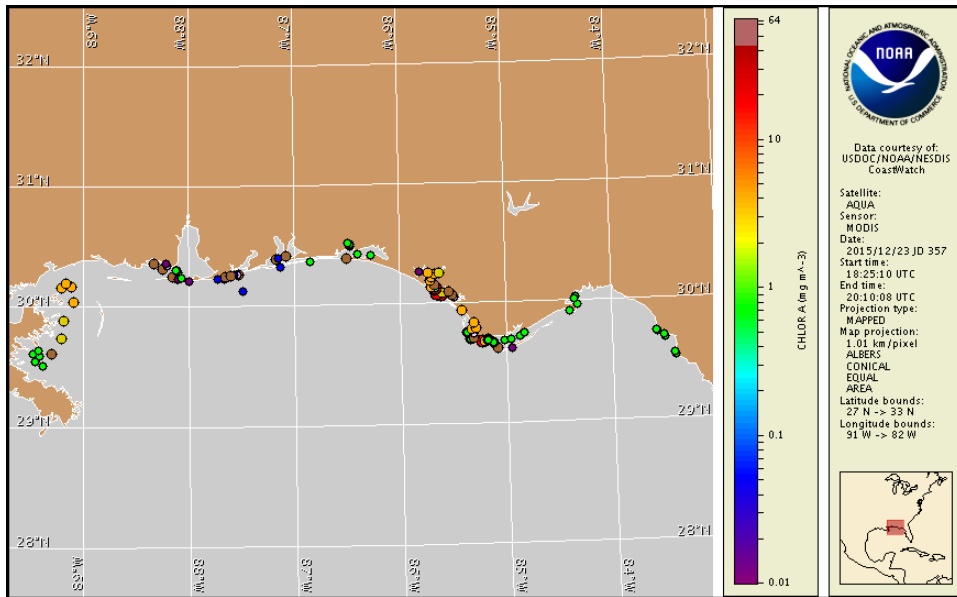
Thursday, 24 December 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, December 21, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from December 14 to 23: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore St. Bernard Parish in Louisiana; Harrison and Jackson counties in Mississippi; Mobile and Baldwin counties in Alabama; and portions of northwest Florida from Escambia to Franklin counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore Louisiana, Mississippi, Alabama, and northwest Florida Thursday, December 24 to Monday, December 28 is listed below:

County Region: Forecast (Duration)

St. Bernard Parish: Low (Th-F, M), Moderate (Sa-Su)

Harrison County: Moderate (Th-Su), High (M)

Harrison County, bay regions: Moderate (Th-Su), High (M)

Jackson County: Moderate (Th-Su), High (M)

Mobile County: Moderate (Th-Su), High (M)

Baldwin County: Moderate (Th-Su), High (M)

Baldwin County, east bay regions: Low (Th-M)

Escambia County: Low (Th-M)

Escambia County, bay regions: Low (Th-M)

Santa Rosa County: Low (Th-M)

Santa Rosa County, bay regions: Low (Th-M)

Okaloosa County: Low (Th-M)

Okaloosa County, bay regions: Low (Th-M)

Walton County: Low (Th-M)

Bay County: Moderate (Th, M), Very Low (F-Su)

Bay County, bay regions: High (Th-M)

Gulf County: Very Low (Th-M)

Gulf County, west bay regions-St. Joseph Bay area: Moderate (Th-M)

Gulf County, east bay regions-Indian Lagoon area: High (Th-M)

Franklin County: Low (Th-M)

Franklin County, bay regions: Moderate (Th-M)

All Other NWFL County Regions: None expected (Th-M)

SWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#swfl>

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Respiratory irritation has been reported in Franklin County, FL. Respiratory irritation and dead fish were reported from Escambia and Okaloosa counties, FL.

Analysis

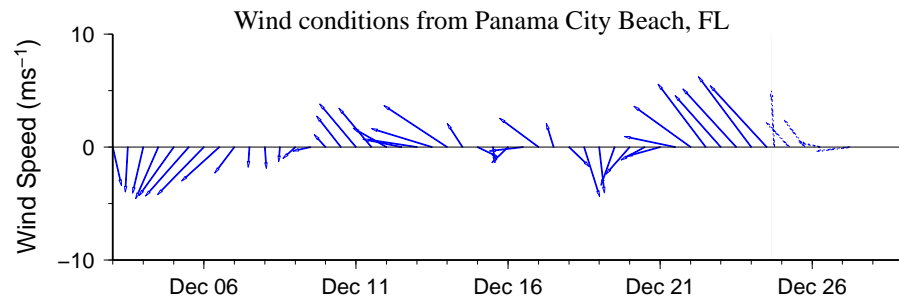
Samples collected along- and offshore Louisiana, Mississippi, Alabama, and northwest Florida indicate background to 'high' *Karenia brevis* concentrations from St. Bernard Parish, LA to Franklin County, FL. New sampling indicates *K. brevis* has decreased to 'very low a' from 'medium' alongshore Dauphin Island, Alabama, and decreased to 'not present' from 'medium' in the St. Vincent Sound region of Franklin County (FWRI, ADPH; 12/15-23). Over the past few days, reports of respiratory irritation and fish kills

have been received from Okaloosa County, FL and reports of respiratory irritation have been received from Franklin County, FL (MML; 12/21-24). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

Recent ensemble imagery (MODIS Aqua, 12/23), has been completely obscured by clouds along the coast from Louisiana to Florida, preventing analysis. Additional sampling of the Louisiana and Mississippi coast is recommended to determine the extent of the *K. brevis* bloom.

Forecasted winds today through Monday may promote the potential for westerly transport of surface *K. brevis* concentrations along the coasts of Louisiana, Mississippi, Alabama, and northwest Florida.

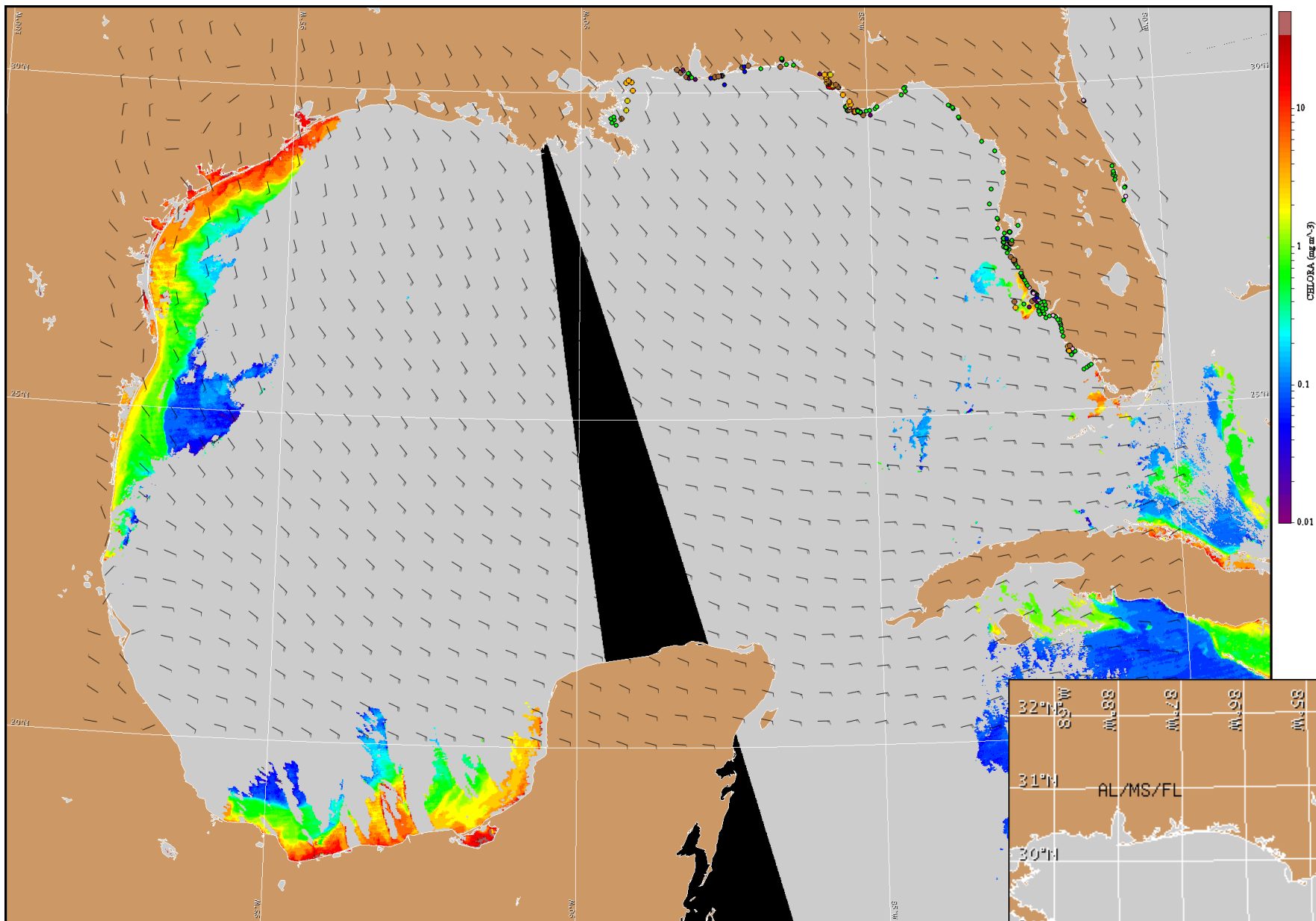
Davis, Lalime



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

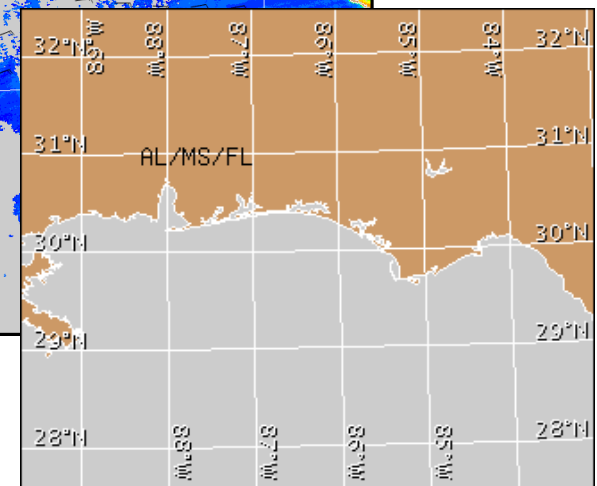
Wind Analysis

Escambia to Gulf counties: South winds (15kn, 8m/s) today becoming southeast winds (10-20kn, 5-10m/s) tonight through Monday.



Satellite chlorophyll image and forecast winds for December 25, 2015 12Z with points representing cell concentration sampling data from December 14 to 23: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).